

a balancing system connected to the dialysis fluid inlet and outlet lines for balancing fresh and spent dialysis fluid; and

a proportioning device for supplying fresh dialysis fluid, the proportioning device comprising:

a water source;

at least one proportioning unit having a first chamber half and second chamber half configured to operate so that liquid is displaced from one chamber half when the other chamber half is filled with liquid;

a proportioning unit inlet line leading from the water source, the proportioning unit inlet line connected to an inlet of the first chamber half and an inlet of the second chamber half, and a proportioning unit outlet line connected to an outlet of the first chamber half and an outlet of the second chamber half, so that the chamber halves can be alternately filled and emptied;

at least one mixing point provided in at least one of the proportioning unit inlet line and the proportioning unit outlet line;

at least one dialysis fluid concentrate source for supplying a fluid concentrate to the at least one mixing point for forming a fresh dialysis fluid; and

an equalizing chamber for the fresh dialysis fluid, the equalizing chamber connected to the proportioning unit outlet line, wherein the equalizing chamber provides a variable buffer volume between the proportioning unit and the balancing system such that the flow rate of a dialysis fluid through the dialysis fluid chamber has no effect on the flow rate of the fresh dialysis fluid in the proportioning unit outlet line.

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2. (amended) The dialysis machine according to claim 1, wherein one mixing point is provided in the proportioning unit inlet line, and at least one mixing point is provided in the proportioning unit outlet line.

a 3. (amended) The dialysis machine according to claim 1, wherein the proportioning unit inlet line has a first inlet branch in fluid communication with the inlet of the first chamber half and a second inlet branch in fluid communication with the inlet of the second chamber half, and wherein the proportioning unit outlet line has a first outlet branch in fluid communication with the outlet of the first chamber half and a second outlet branch in fluid communication with the outlet of the second chamber half, the machine further comprising a first inlet cutoff element provided in the first inlet branch, a second inlet cutoff element provided in the second inlet branch, a first outlet cutoff element provided in the first outlet branch, and a second outlet cutoff element provided in the second outlet branch.

4. (amended) The dialysis machine according to claim 3, wherein the equalizing chamber further comprises:

a liquid level indicator; and

a control unit to control the first inlet cutoff element, the second inlet cutoff element, the first outlet cutoff element, and the second outlet cutoff element after a liquid level drops below a predetermined setpoint.

5. (amended) The dialysis machine according to claim 1, wherein the equalizing chamber further comprises:

an outlet connected to a supply line;

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a first inlet connected to the proportioning unit outlet line; and

a second inlet connected to a recirculation line branching off from the supply line.

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8. (amended) The dialysis machine according to claim 1, wherein the at least one

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dialysis fluid concentrate source comprises a first concentrate container for holding a first concentrate, the first concentrate container in fluid connection with a first concentrate line in fluid communication with a first mixing point in the proportioning unit inlet line upstream from the proportioning unit.

9. (amended) The dialysis machine according to claim 8, wherein the at least one

dialysis fluid concentrate source further comprises a second container for holding a second concentrate, the second concentrate container in fluid connection with a second concentrate line in fluid communication with a second mixing point in the proportioning unit outlet line downstream from the proportioning unit.

10. (amended) The dialysis machine according to claim 9, wherein the at least one

dialysis fluid concentrate source further comprises a third container for holding a third concentrate, the third concentrate container in fluid connection with a third concentrate line in fluid communication with a third mixing point in the proportioning unit outlet line downstream from the second mixing point.

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13. (amended) The dialysis machine according to claim 1, further comprising:

at least one of a degassing and a heating unit connected to the proportioning unit inlet line.

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a3 14. (amended) A method of operating a dialysis machine, comprising the steps of:  
sending fresh dialysis fluid to a dialysis fluid chamber of a dialyzer, the chamber divided by a semipermeable membrane into the dialysis fluid chamber and a chamber for the liquid to be purified;

removing dialysis fluid from the dialysis fluid chamber; and  
balancing spent and fresh dialysis fluid in a balancing system whereby the fresh dialysis fluid is prepared by:

filling alternately a first and a second chamber half of at least one  
proportioning unit with at least one of water and a mixture of water and at least one  
dialysis fluid concentrate;

discarding a liquid from the other chamber half;

adding at least one dialysis fluid concentrate to the liquid discarded from the  
other chamber half and a liquid supplied to the chamber to prepare the fresh dialysis  
fluid;

collecting the fresh dialysis fluid in an equalizing chamber before the fresh  
dialysis fluid is sent to the dialysis fluid chamber, wherein the equalizing chamber  
provides a variable buffer volume between the at least one proportioning unit and the  
balancing system such that the flow rate of the dialysis fluid through the dialysis fluid  
chamber has no effect on the flow rate of the fresh dialysis fluid into the equalizing  
chamber.

15. (amended) The method according to claim 14, wherein a liquid level is monitored  
within the equalizing chamber, and further comprising the step of:

switching the at least one proportioning unit until the liquid level is again above a

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